RICH AND LEFT BEHIND IN THE SAME CITY: UNRAVELING INCOME INEQUALITY IN DKI JAKARTA

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ABSTRACT

Income inequality remains a persistent challenge in DKI Jakarta, a province characterized by dense urban dynamics and substantial socio-economic disparities across its five administrative cities and one regency. By using secondary data from five administrative cities and one administrative regency in DKI Jakarta Province between 2018 and 2022, this study seeks to investigate the factors that contribute to income inequality. All of the data came from Statistics Indonesia's (BPS) official publications, and they were all examined using EViews 13 software using Random Effect Model (REM) method and panel data regression. The findings reveal that HDI and poverty rate significantly and positively affect income inequality, indicating that higher HDI does not yet reflect equitable development and that increasing poverty deepens disparities among regions. Conversely, economic growth shows no significant relationship with inequality, suggesting that growth in Jakarta has not been inclusive. These results strengthen the argument that structural gaps in human development and persistent poverty remain central drivers of inequality. This research is limited by the scope of variables and time frame, therefore, future studies are encouraged to incorporate additional indicators such as unemployment, fiscal policies, and spatial accessibility for broader analytical depth.
Keywords: Human Development Index, Poverty, Economic Growth

1. INTRODUCTION

Income inequality is a common phenomenon observed in various countries worldwide, including both developed and developing nations, such as Indonesia. As a country with significant economic potential, Indonesia has become the focus of global investors, particularly after economic downturns in Europe and America. Indonesia's strategic role in driving regional economic growth both within ASEAN and globally is supported by stable domestic growth and a consistent inflow of foreign investment. Nevertheless, national development achievements have yet to demonstrate optimal equity, whether across provinces, districts/cities, urban and rural areas, or among social groups (Kuncoro, 2019).

One of the main indicators of successful development in a region or country is the rate of economic growth. Economic growth reflects increased production activities of goods and services in society, which in turn improves the population's welfare (Sukirno, 2019). The higher the growth rate, the greater the potential for welfare improvement. Conversely, slower growth tends to reduce living standards. However, economic growth that is not accompanied by equitable development distribution remains a major challenge, particularly in developing countries.

Income inequality is a common reality encountered in many countries around the world, both developed and developing, including Indonesia. As a nation with significant economic potential, Indonesia has attracted the attention of global investors, particularly following the economic downturn in Europe and America. Indonesia's strategic role in driving regional

economic growth both within ASEAN and globally is supported by stable domestic economic performance and a continuous influx of foreign investment. Nevertheless, the achievements of national development have yet to reflect equitable distribution, whether across provinces, cities/regencies, between rural and urban areas, or among different social groups (Kuncoro, 2019).

The rate of economic growth is one of the primary markers of a region's or nation's successful development. The rise in societal production of goods and services is reflected in economic growth, which enhances public welfare (Sukirno, 2019). The likelihood of greater prosperity increases with the growth rate. Conversely, slow economic growth tends to lower the standard of living. However, economic growth that is not accompanied by equitable distribution of development outcomes remains a significant issue, particularly in developing countries.

In Indonesia, the Gini Ratio Index is frequently used to quantify income inequality. On a scale from zero (0), which denotes perfect equality, to one (1), which denotes perfect inequality, this index shows the degree of inequality or overall disparity (Hasell, 2023). Generally, the Gini Ratio Index in Indonesia is calculated based on disparities in household expenditure.

The Special Capital Region (DKI) of Jakarta, as the capital city of Indonesia, consists of five administrative cities Central Jakarta, North Jakarta, East Jakarta, West Jakarta, and South Jakarta and one administrative regency, namely the Thousand Islands. As the center of government and national economic activity, DKI Jakarta is expected to serve as an example of equitable income distribution among its residents. However, in recent years, Jakarta has ranked among the provinces with the highest levels of income inequality in Indonesia. Moreover, its inequality ratio has consistently exceeded the national average. This disparity is closely linked to various factors, including high poverty rates, open unemployment, and the prolonged impacts of the COVID-19 pandemic (Taufiq, 2023).

Table 1. Gini Ratio Index of DKI Jakarta Province and Indonesia, 2018–2022

Year	DKI JAKARTA	INDONESIA
2018	0,394	0,3865
2019	0,394	0,381
2020	0,399	0,383
2021	0,409	0,3825
2022	0,423	0,3825

Source: Badan Pusat Statistik (2022)

Based on Table 1 above, over the past five years (2018–2022), the Gini Ratio Index in DKI Jakarta Province has shown an upward trend from 2019 to 2022, with values of 0.394 in 2019; 0.399 in 2020; 0.409 in 2021; and 0.423 in 2022. Meanwhile, when comparing the Gini Ratio Index of DKI Jakarta Province with the national level, it can be observed that during the 2018–2022 period, Jakarta's index consistently remained above the national average. Income inequality in DKI Jakarta falls within the moderate category, as its Gini coefficient lies between 0.3 and 0.5.

Numerous factors have contributed to the rise in DKI Jakarta's Gini Ratio, which measures the degree of income inequality, and its sustained standing above the national average in recent years. Gary S. Becker's human capital theory states that investments in health, education, and training can improve an employee's skills and productivity (Priyono and Ismail, 2016). This theory states that people with higher levels of education are more likely than those with lower levels to land well-paying jobs. Education is one of the three primary components of the Human Development

Index (HDI), along with health and a reasonable standard of living.

Another factor believed to influence income inequality is poverty. Regional income disparities are commonly affected by several factors such as poverty, inflation, unemployment, fiscal policy, and others (Ibnurrasyad, 2014). Poverty affects income inequality because it indicates unmet basic needs, which typically arise from declining income levels, further widening the income gap (Arafah and Khoirudin, 2022).

According to (Rahardja and Mandala Manurung, 2019), disparities in income distribution can be reduced if economic growth creates more job opportunities and enhances productivity, ultimately leading to more equitable income distribution. The economic growth rate of a region is calculated based on changes in Gross Regional Domestic Product (GRDP) at constant prices compared to the previous year. An increase in GRDP reflects economic development and regional growth, which may in turn influence regional income inequality.

In many developing nations, including Indonesia, income inequality is still a serious issue. In addition to reflecting an unequal allocation of financial resources, this inequality also points to systemic obstacles to inclusive and sustainable development. (Khan and Naeem, 2020) emphasized the close connection between human resource development, income inequality, and corruption. The gap between the rich and the poor eventually widens as a result of corruption's ineffective resource allocation. This implies that inequality has a connection to governance in addition to being an economic problem.

Numerous empirical studies show that economic growth is negatively impacted by income inequality, particularly in developing nations. According to (Saleem, Farooq and Aurmaghan, 2021) and (Ali, Tariq and Khan, 2022), inequality slows growth and makes poverty worse. According to (Vo *et al.*, 2019), there is a reciprocal relationship between inequality and growth, demonstrating that in middle-income nations, inequality both causes and results in economic stagnation. (Le and Nguyen, 2019) discovered that inequalities in income can impede development in Vietnam by causing disparities in access to education, imbalances in fertility, and weak capital markets. In contrast, (Putri and Aminda, 2024) and (Khoirudin and Musta'in, 2020) found that while economic growth has no discernible effect on income distribution, unemployment rates and regional minimum wages have a positive influence on inequality in Indonesia. These findings align with (Yuliani, 2015) findings in East Kalimantan, confirming the relevance of the Kuznets Hypothesis, which suggests that inequality rises in the early stages of development and declines as the economy matures.

Inequality can also be explained by the quality of human capital and education. The Human Development Index (HDI), which incorporates aspects related to health and education, is essential for lowering inequality, according to (Ersad, Amri and Zulgani, 2022), (Julihanza and Khoirudin, 2023), who discovered that enhancing human capital dramatically lowers inequality over time, corroborate these findings.

Since the Kuznets Curve was first proposed in 1955, there has been much theoretical discussion regarding the connection between economic growth and income inequality. According to this theory, inequality rises in the early phases of development and falls as wealth redistribution and per capita income increase. Using panel data from 189 nations between

1990 and 2015, (Bouincha and Karim, 2018) discovered that the inverse relationship between inequality and growth is only significant in developed countries and not consistent in developing economies.

(Aiyar and Ebeke, 2020) emphasized that intergenerational mobility has a significant impact on how inequality affects growth. Inequality slows growth and decreases the accumulation of human capital when social mobility is low. On the other hand, the detrimental effects of inequality are lessened in societies with high levels of mobility. (Shen and Zhao, 2023) who discovered that the relationship between inequality and growth is nonlinear and contingent on a nation's income level, support this.

Additionally, (Lee and Lee, 2018) discovered that while inequality tends to impede growth in low-income and developing nations, it can spur growth in developed nations when wealthy individuals receive substantial investment incentives. Studies conducted at the national and regional levels confirm that regional economic growth is not the only factor influencing inequality. In a Yogyakarta Province study, (Raziq and El Hasanah, 2023) found that while population size and regional minimum wages have a negative impact on inequality, local own-source revenue (PAD) has a positive and significant effect. However, there was no discernible effect of regional gross domestic product (GRDP).

A study by (Lala *et al.*, 2023) in West Kalimantan found that although economic growth has increased, it has not been sufficient to reduce income inequality across districts. The disparity is driven by the concentration of economic activity, weak infrastructure, and differing levels of local economic potential. Thus, equitable investment and infrastructure development are key to reducing interregional inequality. Based on the above discussion, this study seeks to enrich the literature by analyzing income inequality in DKI Jakarta using panel data from five cities and one administrative regency, and variables such as HDI, poverty rate, and economic growth. This approach aligns with both theoretical frameworks and previous empirical findings that emphasize the complex relationship between inequality, human development, and economic growth.

Based on earlier studies, a number of similar factors have been found to affect income inequality. (Nurain and Juliannisa, 2022) found that during the 2015–2020 period, HDI had a significant and positive influence on income disparity in the five Indonesian provinces with the highest levels of inequality: Yogyakarta, Gorontalo, West Java, DKI Jakarta, and Papua. In a similar vein, (Arafah and Khoirudin, 2022) discovered that, in Bali Province, between 2011 and 2021, poverty levels and income inequality across regencies and municipalities were significantly positively correlated. (Susanto *et al.*, 2023) noted that during the 2012–2021 period, Banten Province's economic growth had a significant and favorable impact on income inequality.

While prior studies have identified HDI, poverty, and economic growth as contributing factors to income inequality at the national and provincial levels, most have focused on aggregated regions or interprovincial comparisons rather than exploring internal dynamics within a dense and complex province like DKI Jakarta. The province has unique characteristics, with significant disparities between its five administrative cities and one regency. This highlights a research gap in understanding spatial income inequality at the sub-provincial level in Jakarta, especially in the

post COVID-19 context. Therefore, the novelty of this study lies in its analytical approach using panel data across cities/regencies in DKI Jakarta from 2018 to 2022, aiming to measure the effects of HDI, poverty levels, and economic growth on income inequality in a more detailed and recent manner.

Based on the background and supporting data, it becomes essential to analyze and map the variables contributing to income distribution inequality in DKI Jakarta Province because of spatial studies or inter regional panel analyses within a single metropolitan province are stil rarely conducted. Therefore, this study aims to evaluate the impact of three key factors suspected of influencing income inequality namely HDI, poverty rate, and economic growth. The analysis focuses on assessing the direction and magnitude of each factor's influence on income inequality across cities and the regency in DKI Jakarta during the 2018–2022 period.

2. METHOD

This study uses a quantitative approach, analyzing publicly available datasets on the Jakarta Capital Region (DKI Jakarta) spanning 2013-2022. The time-series dataset consists of the region's Human Development Index (HDI), poverty rate, unemployment rate, and economic growth rate as quadrinal indicators. All were obtained from the Central Statistics Agency's official publications which are accessible online at bps.go.id, alongside statistical software EViews version 13 for analysis. The analytical technique used in this research is panel data regression.

To determine the most appropriate panel regression model, the Hausman Test was conducted, which serves to choose between the Random Effect Model (REM), Fixed Effect Model (FEM), or Common Effect Model (CEM). The selection of the best model is based on the probability value of the cross-section random test (Widarjono, 2018). The analytical methodology employed is quantitative with a descriptive approach, aimed at explaining the relationship between variables influencing income inequality in the DKI Jakarta region. The independent variables in this study include HDI, poverty rate (PR), and economic growth rate (EGR), covering data from six cities/regencies during the 2018 to 2022 period.

$$GRit = \beta 0 + \beta 1IPMit + \beta 2TKit + \beta 3LPEit + eit$$

Explanation:

GR	= Income Inequality (Gini Ratio 0-1)
β0	= Constant
β1,β2,β3	= Regression Coefficient
IPM	= Human Development Index (%)
TK	= Poverty Rate (%)
LPE	= Economic Growth Rate (%)
i	= Cross Section
t	= Time Series
e	= Error Term

3. RESULT AND DISCUSSION

The hypotheses formulated in this study are as follows. First, it is proposed that the Human Development Index (HDI) significantly influences income inequality. Second, the poverty rate is hypothesized to have a significant contribution to income inequality. Third, there is a proposed quantifiable relationship between income inequality and the economic growth rate. Fourth, it is suggested that HDI, poverty rate, and economic growth rate collectively influence income inequality.

To determine the most appropriate panel data model, the Chow Test was employed to choose between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). The

hypotheses tested in this context were: H_0, which states that FEM is the preferred model, and H_a, which posits that CEM is the preferred model. If the resulting F-probability value is less than 0.05 (α), then the null hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected. This outcome indicates that the Fixed Effect Model (FEM) is the most suitable model according to the Chow Test.

Table 2. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.284194	(5,21)	0.0010
Cross-section Chi-square	27.443529	5	0.0000

Source: Data Processed in EViews 13

As can be seen from the above table, the null hypothesis (H0) should be accepted because the F-probability value of 0.0010 is much less than the crucial threshold of 0.05. For additional analysis, the Fixed Effect Model (FEM) is selected. After the Chow Test, the researcher performed a Hausman Test. The purpose of this step was to verify that the Chow and Hausman test results were consistent. Additionally, based on the following hypotheses, the Hausman Test was performed to identify the best model between the Fixed Effect Model (FEM) and the Random Effect Model (REM): The alternative hypothesis (H_a) contends that REM is a better model, while the null hypothesis (H_0) asserts that FEM is the best model. H_0 is accepted and H_a is rejected if the final F-probability value is less than 0.05 (α). This outcome demonstrates that the Fixed Effect Model (FEM) is the best model based on the Hausman Test.

Table 3. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.203940	3	0.1021

Source: Data Processed in EViews 13

Referring to the table above, the p-value from the Hausman Test is 0.1021, which exceeds the significance threshold of 0.05. This result indicates that the null hypothesis (H0) cannot be rejected. As a consequence, the Random Effect Model (REM) is identified as the most suitable model for this study. Since the outcomes of the Chow Test and the Hausman Test do not align, further testing is required to reach a definitive conclusion. The Breusch–Pagan Lagrange Multiplier (LM) Test was used to help with model selection. This test assists in determining which model provides a better fit for the panel data: the Random Effect Model (REM) or the Common Effect Model (CEM). The LM test evaluates the following hypotheses: the alternative hypothesis (H_a) asserts that CEM is more appropriate, while the null hypothesis (H_0) asserts that REM is the proper model.

The decision rule is based on the significance level: if the F-probability is less than 0.05, H0 is accepted and Ha is rejected. In this case, the test results confirm that the Random Effect Model (REM) is the most appropriate model, based on the outcome of the Breusch Pagan LM Test.

Table 4. Breusch Pagan LM Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	6.486947 (0.0109)	2.662181 (0.1028)	9.149128 (0.0025)

Source:Data Processed in EViews 13

Based on the data presented in the previous table, the F-probability value is 0.0025, which is lower than the significance level of 0.05 (5%). Thus, the null hypothesis (H0) cannot be rejected, and the most appropriate model selected is the Random Effect Model (REM). After selecting the model, the researcher proceeded with classical assumption testing. As explained by (Purnomo, 2017), classical assumption tests aim to detect potential violations of the basic

assumptions of regression, such as residual normality, multicollinearity, autocorrelation, and heteroscedasticity. These tests are crucial to ensure that the panel data regression model used produces statistically unbiased and valid estimates.

The normality test was used to see if the residuals of the regression had a normal distribution. According to (Purnomo, 2017), data is considered non-normally distributed if the significance value is less than 0.05 and normally distributed if it is greater than 0.05. The test results showed that a probability value of 0.129135, which is higher than the 0.05 threshold, was obtained. This implies that the residuals from the study have a normal distribution.

Table 5. Normality Test

Jarque-Bera	4.093792
Probability	0.129135

Source: Data Processed in EViews 13

In a linear regression model, the autocorrelation test is used to determine whether the residuals of one observation and those of another are related. According to (Ghozali and Ratmono, 2017), the Durbin-Watson (DW) test is one of the frequently employed techniques to identify autocorrelation. A DW value between -2 and +2 indicates no autocorrelation, whereas a value below -2 indicates positive autocorrelation (Santoso, 2019). In the meantime, positive autocorrelation is also present when the DW value is greater than +2. The obtained DW value, 1.143482, is within the acceptable range according to the test results. As a result, it can be said that the regression model used in this investigation is inconclusive about the existence of autocorrelation.

Tabel 6. Uji Autokorelasi

Mean dependent var	-0.386547
S.D. dependent var	0.119070
Sum squared resid	0.335871
Durbin-Watson stat	1.143482

Source: Data Processed in EViews 13

To determine whether there is variance inequality in the residuals across all observations in the regression model, the Heteroskedasticity Test is then performed. Regressing the absolute residual values is one way to use the Glejser Test method to find out if heteroskedasticity is present. If the probability values for each variable are greater than 0.05, indicating the lack of heteroskedasticity, the null hypothesis (H_0) is accepted. The probability values for all independent variables, X1 (Human Development Index), X2 (Poverty Rate), and X3 (Economic Growth Rate), are higher than the alpha value of 0.05, according to the table below. This implies that there are no heteroskedasticity problems with any of the variables.

Table 7. Uji Heteroskedastisitas

Dependent Variable: ABS_RES
Method: Panel EGLS (Cross-section random effects)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.203370	0.456644	-0.445358	0.6597
X1	0.007316	0.005416	1.350775	0.1884
X2	0.001830	0.006319	0.289567	0.7744
X3	-7.33E-08	1.21E-07	-0.607326	0.5489

Source: Data Processed in EViews 13

The multicollinearity test is used to determine whether the independent variables are correlated in any way. Multicollinearity is considered to be present when the correlation coefficient between independent variables is higher than 0.80. All correlation values between the independent variables in the regression model are less than 0.80, indicating that none of them have multicollinearity issues, as shown in the table below.

Table 8. Uji Multikolinearitas

	X1	X2	X3
X1	1.000000	-0.909132	-0.021649
X2	-0.909132	1.000000	-0.019166
X3	-0.021649	-0.019166	1.000000

Source: Data Processed in EViews 13

Next, the R^2 (R-Squared) statistical test **is** conducted to determine the extent to which the dependent variable**,** Income Inequality, can be explained by the independent variables.

Table 9. Coefficient of Determination Result

R-squared	0.323872
Adjusted R-squared	0.245857

Source: Data Processed in EViews 13

Findings from the regression analysis indicate that the coefficient of determination (R^2) is 0.323872, which shows that approximately 32% of the development income inequality variance in DKI Jakarta Province is explained by the independent variables used in the model, which include: Human Development Index (HDI), poverty rate, and economic growth rate. The rest 68% of the variation is caused by other aspects not included in this model. Furthermore, the value of Adjusted R-squared which was 0.245857 also taking into account number of predictors and sample size indicates that out of these three variables only 24% causative impact variation on inequality while rest 76% were external factors affecting beyond scope of model used.

Table 10. Results of the Random Effect Model (REM) and T-Test

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.690601	1.016029	-2.648154	0.0136
X1	0.023688	0.008738	2.710836	0.0117
X2	0.036189	0.010321	3.506244	0.0017
X3	0.053447	0.056276	0.949737	0.3510

Source: Data Processed in EViews 13

The Random Effect Model (REM) is an approach in panel data analysis that utilizes the Generalized Least Square (GLS) method, under the assumption that the error term is correlated across individuals and time (Ghozali and Ratmono, 2017). Several important conclusions can be drawn from this study's estimation results using the Random Effect Model (REM). First, the constant value of -2.690601 means that the expected income inequality is -2.690601 when the poverty rate, economic growth rate, and Human Development Index (HDI) are held constant. Second, the HDI variable has a positive and statistically significant coefficient of 0.023688, indicating that, assuming all other variables stay the same, an increase of one unit in HDI results in an increase of 0.023688 units in income inequality. Third, the poverty rate also has a significant positive effect on income inequality, with a coefficient of 0.036189, indicating that a one-unit increase in the poverty rate corresponds to a 0.036189 unit increase in income inequality. Lastly, the economic growth rate has a coefficient of 0.05347, which, although positive, is statistically insignificant. This implies that changes in the economic growth rate do not have a meaningful effect on income inequality when other factors are controlled.

In addition, the REM estimation provides t-statistics for each independent variable. Therefore, a t-test was conducted to assess the partial influence of each variable by comparing the t-statistic to the critical t-value or assessing the probability value against a significance level ($\alpha = 0.05$). The t-table value is determined based on the degrees of freedom ($df = n - k$), where n is the number of observations and k is the number of independent variables. In this study, with $df = 27$ and $\alpha = 0.05$, the critical t-value is 2.052.

The t-statistic for only the Economic Growth Rate variable is 0.949737., which is less than the critical t-value of 2.052, and a p-value of 0.3510, which is greater than 0.05, according to Table 10. Therefore, it can be said that this variable has no discernible impact on income inequality. This finding is consistent with research by (Khoirudin and Musta'in, 2020) and (Putri and Aminda, 2024) who revealed that in certain regions of Indonesia, economic

growth has not significantly contributed to reducing income disparities due to the absence of redistributive policies and uneven development patterns. But contrasts with the results of (Susanto *et al.*, 2023), who found a positive and significant effect, and also contradicts Kuznets' theory (as cited in (Damanik, Zulgani and Rosmeli, 2018), which posits that economic growth in the early stages of development in developing countries tends to increase income inequality and poverty. Because economic growth is not inclusive, its impact on income inequality is negligible. Economic growth frequently favors already economically privileged people and areas, leaving marginalized groups out of the benefits. This happens when growth is concentrated in urban or capital-intensive sectors, with little effect on labor-intensive informal sectors or rural communities. Furthermore, lower-income groups are unable to fully participate in the economic expansion due to structural inequalities like unequal access to infrastructure, financial capital, health care, and education. As a result, the income distribution is still skewed even when the GDP rises.

Meanwhile, the other independent variables HDI and Poverty Rate exhibited similar outcomes, with their respective t-statistics exceeding the critical t-value (2.052) and p-values below 0.05. Thus, it can be said that each of the two factors significantly reduces income inequality. The results of (Nurain and Juliannisa, 2022) are in line with the positive and significant relationship between HDI and income inequality but contrast with (Ersad, Amri and Zulgani, 2022) and (Julihanza and Khoirudin, 2023) who indicate that an increase in human capital (a key indicator of HDI) reduces inequality. The Administrative Regency of the Thousand Islands performs worse than the five administrative cities in DKI Jakarta, South Jakarta, Central Jakarta, North Jakarta, East Jakarta, and West Jakarta, despite their comparatively high HDI scores. The disparities are primarily in terms of infrastructure and facilities in health and education, as well as a shortage of medical and teaching personnel (DJPB DKI, 2021).

Additionally, the positive and significant relationship between the poverty rate and income inequality aligns with the findings of (Saleem, Farooq and Aurmaghan, 2021), (Ali, Tariq and Khan, 2022), (Arafah and Khoirudin, 2022). The number of people living in poverty in DKI Jakarta, particularly during the COVID-19 pandemic (2020–2022), showed an increasing trend: 480,860 in 2020; 501,920 in 2021; and 502,040 in 2022 (Statistics Indonesia, 2022). This rising trend in poverty coincided with the increase in the Gini Ratio Index in DKI Jakarta over the same period: 0.399 in 2020, 0.409 in 2021, and 0.423 in 2022 (Badan Pusat Statistik, 2022).

Table 11. The Result of F-Test

F-statistic	4.151420
Prob(F-statistic)	0.015727

Source: Data Processed in EViews 13

To ascertain whether each independent variable in a regression model significantly affects the dependent variable, the F-Test, also known as the joint significance test, is utilized. This factor results in a hypothesis test that contrasts a critical value from an F-distribution table with the F-statistic derived from computations. The null hypothesis, which holds that the independent variables taken together have some significant effects on the dependent variable, is supported if the computed F-statistic is greater than the critical F-value and its p-value is less than 0.05 (α). In this case study, we set the critical F-value at 2.9752 while your calculated F-statistic came out as 4.151420 with p-value of 0.015727 which indeed is lower than threshold of 0.05. Thus it can be concluded that HDI, poverty rate, and economic growth rate together greatly

influence income inequality above and beyond any one of these factors alone. It corroborates model validity and confirms further research exploration and analysis is warranted in this research work.

Also, these results are consistent with (Arafah and Khoirudin, 2022) who showed considering such factors as poverty, education, HDI along with economic growth alongside population size had bearing income disparity across regencies and municipalities of Bali Province.

4. CONCLUSION

Several important conclusions can be made from the examination of the variables affecting income inequality in the administrative cities and regency of DKI Jakarta Province from 2018 to 2022. This study shows that income inequality in DKI Jakarta is strongly influenced by disparities in human development and rising poverty levels, particularly in areas with limited basic infrastructure such as the Thousand Islands. These findings reinforce Gary Becker's human capital theory, which suggests that unequal access to education and health services widens income gaps. The positive relationship between poverty and inequality also supports distribution theories asserting that low-income groups tend to fall further behind without targeted government intervention.

Meanwhile, economic growth was found to have no significant impact on inequality, aligning with literature indicating that non-inclusive growth does not automatically reduce disparities. This suggests that Jakarta's capital-intensive economic structure has not provided broad benefits to lower-income communities.

This study is limited by the number of variables used and the relatively short observation period, which may not fully capture broader socioeconomic and spatial dynamics. Therefore, future research is recommended to include additional variables such as unemployment, minimum wages, and public service accessibility and to apply spatial analysis methods to provide a more comprehensive understanding of the determinants of income inequality in Jakarta.

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